ELSEVIER

Journal of Alloys and Compounds 280 (1998) 323

Journal of ALLOYS AND COMPOUNDS

Author Index of Volume 280

Abilov, Ch.I., 209
Adorno, A.T., 188
Akiba, E., 262, 306
Akune, K., 131
Anres, P., 158

Bauer, E., 26
Benedetti, A.V., 188
Blachnik, R., 147
Boettger, G., 44
Boily, S., 306
Bose, D.K., 255
Bradhurst, D.H., 290
Brand, R.A., 273
Bros, J.P., 158
Buschow, K.H.J., 44

Chakraborty, S.P., 255
Chen, J., 290
Cheng, Q.M., 310
Choi, W.-K., 99
Colmenero, J.C., 131
Cornish, L.A., 240
Cotes, S., 168

Dammak, M., 107
Daoud, A., 107
Dash, S., 94
de Boer, F.R., 44
de Groot, C.H., 44
De Leebeeck, H., 1
Dharwadkar, S.R., 56
Diamandescu, L., 273
Dou, S.X., 290
Dubenskii, V.P., 199

Eivazov, E.A., 209
Enoki, H., 262

Fauth, F., 44
Fernández Guillermet, A., 168
Ferro, R., 26
Fornasini, M.L., 211
Fujii, H., 279
Fujimori, H., 294
Fukuda, T., 65
Furukawa, N., 114

Gasanova, M.S., 209
Gaune-Escard, M., 158
Giovannini, M., 26
Goreshnik, E.A., 199
Görller-Walrand, C., 1
Grushko, B., 215

Hamasaki, K., 104
Hanko, J.A., 71
Hayer, E., 158
Hill, P.J., 240
Hilscher, G., 26
Holland-Moritz, D., 215
Horiuchi, H., 65
Horyń, R., 85
Hu, W.-K., 314
Huot, J., 306
Hurtado, M.R.F., 188

Iizumi, H., 204
Ikeda, K., 279
Inoue, H., 99, 104, 114
Itoh, Y., 39
Ivanova, T.I., 16, 20
Iwakura, C., 99, 104, 114

Jacob, K.T., 138

Kaczorowski, D., 196
Kadomatsu, H., 39
Kakihana, M., 125
Kalychak, Ya.M., 199
Kanatzidis, M.G., 71
Kaneko, T., 294
Kapała J., 77
Kato, S., 125
Khemakhem, H., 107
Klein, B., 284
Kleppa, O.J., 231
Klyamkine, S., 284
Kolsi, A.W., 107
Kudou, K., 65

Latroche, M., 284
Le Berre, F., 85
Lin, J.H., 310
Lisek, I., 77
Liu, H.K., 290

Mah, K.W., 299
Manfrinetti, P., 211
Maniette, Y., 188
Matsumoto, T., 204
Meschel, S.V., 231
Mhiri, T., 107
Michor, H., 26
Mihaila-Tarabasanu, D., 273
Miller, M., 77
Mishra, R., 56
Morozkin, A.V., 178
Moskalev, V.A., 178
Murayama, J.-i., 99

Namboodiri, P.N., 56
Nikitin, S.A., 16
Nohara, S., 104
Noréus, D., 314

Obi, Y., 294
Okabe, T.H., 265
Okada, S., 65
Oku, M., 65
Orimo, S., 279

Padiou, J., 85
Palenzona, A., 211
Parida, S.C., 94
Park, I., 265
Pastushenkov, Yu.G., 20
Peña, O., 85
Percheron-Guégan, A., 284
Perrin, C., 85
Portillo, J., 188
Prasad, R., 94

Raghavan, S., L1
Ritter, C., 4, 44
Rogl, P., 26
Römermann, F., 147
Ryabinkin, I.G., 178

Sade, M., 168
Saez-Puche, R., 1
Schlapbach, L., 279
Schobinger-Papamantellos, P., 4, 44
Schulz, R., 306
Senoh, H., 114
Seropegin, Yu.D., 178
Sharma, I.G., 255
Shin-ya, R., 99
Shishido, T., 65
Simon, N., 284
Singh, Z., 94
Skokov, K.P., 16, 20
Sorescu, M., 251, 273
Stępień-Damm, J., 196
Su, M.Z., 310
Suzuki, K., 294
Sviridov, I.A., 178

Takano, N., 204
Telegina, I.V., 16, 20
Terasaki, F., 204
Tessier, P., 262
Tripathi, S.N., 56
Troć, R., 196
Tskhadadze, I.A., 16, 20, 178
Tsushio, Y., 262

Ueda, M., 114
Uyenishi, Y., 204

Vana Varamban, S., 138
Venugopal, V., 94

Waseda, Y., 265
Wilde, G., 215
Witcomb, M.J., 240
Wittmann, R., 215
Wojakowski, A., 85

Yashima, M., 125
Ye, J., 65
Ye, Z., 314
Yoon, S.F., 299
Yoshida, H., 294
Yoshikawa, A., 204
Yoshimura, M., 125

Zaharko, O., 4
Zaremba, V.I., 196, 199
Zeinalov, S.A., 209
Zhang, S.G., 99, 104
Zheng, H.Q., 299
Züttel, A., 279

Elsevier Science S.A.
PII: S0925-8388(98)00810-X

ELSEVIER

Journal of Alloys and Compounds 280 (1998) 325–329

Journal of ALLOYS AND COMPOUNDS

Subject Index of Volume 280

AB_2
improvement of the thermodynamical and electrochemical properties of multicomponent Laves phase hydrides by thermal annealing 284
AES
surface analyses of an alkali-treated $Zr_{0.9}Ti_{0.1}Ni_{1.1}Co_{0.1}Mn_{0.6}V_{0.2}$ alloy for use in nickel–metal hydride batteries 99
Ag–Pb–Te system
experimental investigation and thermodynamic calculation of excess enthalpies in the Ag–Pb–Te system 147
Al–Ir intermetallics
constitution and hardnesses of the Al–Ir system 240
Al–Ir system
constitution and hardnesses of the Al–Ir system 240
Alkali-treatment
surface analyses of an alkali-treated $Zr_{0.9}Ti_{0.1}Ni_{1.1}Co_{0.1}Mn_{0.6}V_{0.2}$ alloy for use in nickel–metal hydride batteries 99
Al–Ni–Co
transition between periodic and quasiperiodic structures in Al–Ni–Co 215
Aluminothermic reduction
a study on the preparation of iron aluminium based intermetallic alloy by aluminothermic smelting technique 255
Amorphous
electrochemical characteristics of an amorphous $Mg_{0.9}V_{0.1}Ni$ alloy prepared by mechanical alloying 104
Amorphous alloys
the role of magnetostriction in pulsed laser irradiation of amorphous alloys 251
cobalt- and copper-substitution effects on thermal stabilities and hydriding properties of amorphous MgNi 279
Annealing effect
studies on multi-component rare earth-based hydrogen storage alloys with small amounts of boron 314
Antiferromagnetic ordering
on the magnetic ordering of $R_6Fe_{13}X$ compounds 44

Binary rare-earth germanides
antiferromagnetic ordering in the novel Ho_5Ge_5 and $HoGe_{1.85}$ compounds studied by X-ray and neutron diffraction 4

Calorimetry
experimental investigation and thermodynamic calculation of excess enthalpies in the Ag–Pb–Te system 147
standard enthalpies of formation of some 5d transition metal silicides by high temperature direct synthesis calorimetry 231
$CaNi_5$ deuterides
determination of the position and occupancy of deuterium in $CaNi_5$ deuterides by neutron diffraction 204
$CaTeO_3$
partial phase diagram of $CaO–TeO_2$ system 56
$CaTe_2O_5$
partial phase diagram of $CaO–TeO_2$ system 56
Ceria
preparation of tetragonal ZrO_2–12 mol% CeO_2 and ZrO_2–6 mol% $YO_{1.5}$ solid solutions at reduced temperature by a simple aqueous solution route using citric acid as a complexant 125
Characterization
structure and characterization of a mixed crystal $Rb_2SO_4.Te(OH)_6$ 107
a study on the preparation of iron aluminium based intermetallic alloy by aluminothermic smelting technique 255
Chemical potential diagram
phase equilibria and thermodynamic properties of ternary oxides in the system Co–Mo–O 138
Chemical synthesis
synthesis and magnetic properties of haematite with different particle morphologies 273
Chevrel phases
novel crystal structure in the Chevrel-phase compound $EuMo_6Se_8$. Transport and magnetic properties 85
Citric acid route
preparation of tetragonal ZrO_2–12 mol% CeO_2 and ZrO_2–6 mol% $YO_{1.5}$ solid solutions at reduced temperature by a simple aqueous solution route using citric acid as a complexant 125
$CoMoO_4$
phase equilibria and thermodynamic properties of ternary oxides in the system Co–Mo–O 138
phase equilibria and thermodynamic properties of ternary oxides in the system Co–Mo–O 138
Continuous cooling
effect of continuous cooling on the decomposition processes in a Zn–1.6 wt.% Al alloy 131
Continuous precipitate
effect of continuous cooling on the decomposition processes in a Zn–1.6 wt.% Al alloy 131
Coordination polyhedra
the crystal structure of $R_{10}Co_9In_{20}$ (R=Er, Tm, Lu) compounds 199
CrN
synthesis of the compound CrN by DC reactive sputtering 294
Crystal field
paramagnetic susceptibilities of trivalent neodymium in $LiYF_4$ 1
Crystal structure
antiferromagnetic ordering in the novel Ho_5Ge_5 and $HoGe_{1.85}$ compounds studied by X-ray and neutron diffraction 4
on the magnetic ordering of $R_6Fe_{13}X$ compounds 44
phase equilibria in the {Sm,Tb,Tm}–Mn–Si systems at 870/1070 K. Structural data and melting temperatures of some ternary compounds in the R–Mn–Si systems (R=Y, La–Lu) 178
crystal structure of UCu_5In 196
the crystal structure of $R_{10}Co_9In_{20}$ (R=Er, Tm, Lu) compounds 199
synthesis of the compound CrN by DC reactive sputtering 294
on synthesis and magnetic properties of $Nd(Fe, Mo, Ti)_{12}Z_x$ (Z=N, H) 310
Crystal structure determination
structure and characterization of a mixed crystal $Rb_2SO_4.Te(OH)_6$ 107

Elsevier Science S.A.
PII: S0925-8388(98)00811-1

Crystal structures
novel crystal structure in the Chevrel-phase compound $EuMo_6Se_8$. Transport and magnetic properties 85
the phase diagram of the Eu–Sn system 211
$CsCl–CeCl_3$ system
thermodynamic study of the $CsCl–CeCl_3$ system by Knudsen effusion mass spectrometry 77
Cu–Al alloys
a complex structure in the $(\beta+\gamma_0)$ region of the Cu–Al alloys 188

Differential thermal analysis
partial phase diagram of $CaO–TeO_2$ system 56
Discontinuous precipitation
effect of continuous cooling on the decomposition processes in a Zn–1.6 wt.% Al alloy 131
Driving forces
phase stability and fcc/hcp martensitic transformation in Fe–Mn–Si alloys: Part II. Thermodynamic modelling of the driving forces and the M_S and A_S temperatures 168

Electrical properties
electrical resistivity, oxidation resistivity and hardness of single crystal compounds in the Er–Rh–B system 65
Electrical resistivity
electrical and magnetic properties of YbPdGe and YbPtGe 39
Electrochemical hydrogen storage property
studies on multi-component rare earth-based hydrogen storage alloys with small amounts of boron 314
Electrochemistry
tantalum powder production by magnesiothermic reduction of $TaCl_5$ through an electronically mediated reaction (EMR) 265
Enthalpies of formation
standard enthalpies of formation of some 5d transition metal silicides by high temperature direct synthesis calorimetry 231
Enthalpy of formation
thermodynamic studies on $LaFeO_3(s)$ 94
enthalpy of formation of the (Pt–Sn) system 158
cobalt- and copper-substitution effects on thermal stabilities and hydriding properties of amorphous MgNi 279
Enthalpy of mixing
enthalpy of formation of the (Pt–Sn) system 158
$ErRh_3B$
electrical resistivity, oxidation resistivity and hardness of single crystal compounds in the Er–Rh–B system 65
$ErRh_3B_2$
electrical resistivity, oxidation resistivity and hardness of single crystal compounds in the Er–Rh–B system 65
$ErRh_4B_4$
electrical resistivity, oxidation resistivity and hardness of single crystal compounds in the Er–Rh–B system 65
Europium alloys
the phase diagram of the Eu–Sn system 211
Excess enthalpies
experimental investigation and thermodynamic calculation of excess enthalpies in the Ag–Pb–Te system 147

Fe alloys
phase stability and fcc/hcp martensitic transformation in Fe–Mn–Si alloys: Part II. Thermodynamic modelling of the driving forces and the M_S and A_S temperatures 168
Fe–Mn–Si
phase stability and fcc/hcp martensitic transformation in Fe–Mn–Si alloys: Part II. Thermodynamic modelling of the driving forces and the M_S and A_S temperatures 168
Fermi enthalpy
enthalpy of formation of the (Pt–Sn) system 158
Friauf-Laves phase
hydrogenation properties of $Mg_{1-x}M1_xCu_2$ (M1=La and Nd) with larger interstitial sites than $MgCu_2$ 262

Galvanic cell
standard Gibbs energy of formation of $CaSb_2O_4$ using a calcium fluoride solid electrolyte galvanic cell L1
Gibbs energy
phase equilibria and thermodynamic properties of ternary oxides in the system Co–Mo–O 138
Gibbs energy of formation
standard Gibbs energy of formation of $CaSb_2O_4$ using a calcium fluoride solid electrolyte galvanic cell L1
thermodynamic studies on $LaFeO_3(s)$ 94
Gibbs free energy of formation
thermodynamic study of the $CsCl–CeCl_3$ system by Knudsen effusion mass spectrometry 77

Hall coefficient
electrical and magnetic properties of YbPdGe and YbPtGe 39
Hardness
constitution and hardnesses of the Al–Ir system 240
High temperature calorimetry
enthalpy of formation of the (Pt–Sn) system 158
High temperature X-ray diffraction
partial phase diagram of $CaO–TeO_2$ system 56
Hydride
on synthesis and magnetic properties of $Nd(Fe, Mo, Ti)_{12}Z_x$ (Z=N, H) 310
Hydrogen storage alloy
electrochemical characteristics of an amorphous $Mg_{0.9}V_{0.1}Ni$ alloy prepared by mechanical alloying 104
theoretical evaluation for thermodynamic stability of constituents of Mm-based hydrogen storage alloy in 6 M KOH solution at relatively high temperatures 114

In–Cr–Te alloys
phase diagram of $In_2Te_3–Cr_3Te_4$ 209
In–Cr–Te phase diagram
phase diagram of $In_2Te_3–Cr_3Te_4$ 209
Indides
the crystal structure of $R_{10}Co_9In_{20}$ (R=Er, Tm, Lu) compounds 199
Indium gallium phosphate
the effect of elastic strain on the optical properties of InGaP/GaAs grown using a valved phosphorus cracker cell in solid source MBE 299
$In_2Te_3–Cr_3Te_4$ system
phase diagram of $In_2Te_3–Cr_3Te_4$ 209
Intermetallic compounds
enthalpy of formation of the (Pt–Sn) system 158
phase equilibria in the {Sm,Tb,Tm}–Mn–Si systems at 870/1070 K. Structural data and melting temperatures of some ternary compounds in the R–Mn–Si systems (R=Y, La–Lu) 178
Intermetallic hydrides
improvement of the thermodynamical and electrochemical properties of multicomponent Laves phase hydrides by thermal annealing 284
Intermetallics
the phase diagram of the Eu–Sn system 211
Iron aluminide alloys
a study on the preparation of iron aluminium based intermetallic alloy by aluminothermic smelting technique 255
IR spectra
structure and characterization of a mixed crystal $Rb_2SO_4.Te(OH)_6$ 107

Knudsen effusion mass spectrometry
thermodynamic study of the CsCl–$CeCl_3$ system by Knudsen effusion mass spectrometry 77

Lanthanum orthoferrite
thermodynamic studies on $LaFeO_3$(s) 94
Laser processing
the role of magnetostriction in pulsed laser irradiation of amorphous alloys 251
Laves phase
improvement of the thermodynamical and electrochemical properties of multicomponent Laves phase hydrides by thermal annealing 284
Laves-phase alloy
surface analyses of an alkali-treated $Zr_{0.9}Ti_{0.1}Ni_{1.1}Co_{0.1}Mn_{0.6}V_{0.2}$ alloy for use in nickel–metal hydride batteries 99
Liquid alloys
experimental investigation and thermodynamic calculation of excess enthalpies in the Ag–Pb–Te system 147
enthalpy of formation of the (Pt–Sn) system 158
$LiYF_4$
paramagnetic susceptibilities of trivalent neodymium in $LiYF_4$ 1

Magnesium-nickel alloys
cobalt- and copper-substitution effects on thermal stabilities and hydriding properties of amorphous MgNi 279
Magnetic anisotropy
magnetic anisotropy and magnetic properties of RTSi (R=Gd, Y; T=Mn, Fe) compounds 16
spin-reorientation transitions and magnetic anisotropy in $TbFe_{11-x}Co_xTi$ compounds 20
Magnetic materials
synthesis and magnetic properties of haematite with different particle morphologies 273
Magnetic phase transition
spin-reorientation transitions and magnetic anisotropy in $TbFe_{11-x}Co_xTi$ compounds 20
Magnetic properties
magnetic anisotropy and magnetic properties of RTSi (R=Gd, Y; T=Mn, Fe) compounds 16
structural chemistry, magnetism and thermodynamic properties of R_2Pd_2In 26
the role of magnetostriction in pulsed laser irradiation of amorphous alloys 251
synthesis and magnetic properties of haematite with different particle morphologies 273
synthesis of the compound CrN by DC reactive sputtering 294
on synthesis and magnetic properties of $Nd(Fe, Mo, Ti)_{12}Z_x$ (Z=N, H) 310
Magnetic structure
antiferromagnetic ordering in the novel Ho_3Ge_5 and $HoGe_{1.85}$ compounds studied by X-ray and neutron diffraction 4
on the magnetic ordering of $R_6Fe_{13}X$ compounds 44
Magnetic superconductors
novel crystal structure in the Chevrel-phase compound $EuMo_6Se_8$. Transport and magnetic properties 85
Magnetic susceptibility
paramagnetic susceptibilities of trivalent neodymium in $LiYF_4$ 1
Magnetization
electrical and magnetic properties of YbPdGe and YbPtGe 39
Magnetostriction
the role of magnetostriction in pulsed laser irradiation of amorphous alloys 251
Martensitic transformation
phase stability and fcc/hcp martensitic transformation in Fe–Mn–Si alloys: Part II. Thermodynamic modelling of the driving forces and the M_s and A_s temperatures 168

MBE
the effect of elastic strain on the optical properties of InGaP/GaAs grown using a valved phosphorus cracker cell in solid source MBE 299
Mechanical alloying
electrochemical characteristics of an amorphous $Mg_{0.9}V_{0.1}Ni$ alloy prepared by mechanical alloying 104
cobalt- and copper-substitution effects on thermal stabilities and hydriding properties of amorphous MgNi 279
direct synthesis of Mg_2FeH_6 by mechanical alloying 306
Metal hydride electrode
the effect of chemical coating with Ni on the electrode properties of Mg_2Ni alloy 290
studies on multi-component rare earth-based hydrogen storage alloys with small amounts of boron 314
Metal hydrides
direct synthesis of Mg_2FeH_6 by mechanical alloying 306
Metallography
a complex structure in the $(\beta+\gamma_m)$ region of the Cu–Al alloys 188
Metallothermic reduction
tantalum powder production by magnesiothermic reduction of $TaCl_5$ through an electronically mediated reaction (EMR) 265
Mg-based alloy
hydrogenation properties of $Mg_{1-x}M1_xCu_2$ (M1=La and Nd) with larger interstitial sites than $MgCu_2$ 262
MgNi
electrochemical characteristics of an amorphous $Mg_{0.9}V_{0.1}Ni$ alloy prepared by mechanical alloying 104
Mg_2Ni
the effect of chemical coating with Ni on the electrode properties of Mg_2Ni alloy 290
Microhardness
electrical resistivity, oxidation resistivity and hardness of single crystal compounds in the Er–Rh–B system 65
Monocalciumantimonite
standard Gibbs energy of formation of $CaSb_2O_4$ using a calcium fluoride solid electrolyte galvanic cell L1
Mössbauer spectroscopy
the role of magnetostriction in pulsed laser irradiation of amorphous alloys 251
synthesis and magnetic properties of haematite with different particle morphologies 273

Nanocrystalline material
direct synthesis of Mg_2FeH_6 by mechanical alloying 306
Neodymium
paramagnetic susceptibilities of trivalent neodymium in $LiYF_4$ 1
Neutron diffraction
antiferromagnetic ordering in the novel Ho_3Ge_5 and $HoGe_{1.85}$ compounds studied by X-ray and neutron diffraction 4
on the magnetic ordering of $R_6Fe_{13}X$ compounds 44
determination of the position and occupancy of deuterium in $CaNi_5$ deuterides by neutron diffraction 204
Nickel coating
the effect of chemical coating with Ni on the electrode properties of Mg_2Ni alloy 290
Nickel–hydrogen battery
electrochemical characteristics of an amorphous $Mg_{0.9}V_{0.1}Ni$ alloy prepared by mechanical alloying 104
Nickel–metal hydride battery
theoretical evaluation for thermodynamic stability of constituents of Mm-based hydrogen storage alloy in 6 M KOH solution at relatively high temperatures 114
Ni–metal hydride battery
surface analyses of an alkali-treated $Zr_{0.9}Ti_{0.1}Ni_{1.1}Co_{0.1}Mn_{0.6}V_{0.2}$ alloy for use in nickel–metal hydride batteries 99

Nitride
on synthesis and magnetic properties of Nd(Fe, Mo, Ti)$_{12}$Z$_x$ (Z=N, H) 310

Oxides
synthesis and magnetic properties of haematite with different particle morphologies 273

Phase diagram
partial phase diagram of CaO–TeO$_2$ system 56
phase equilibria and thermodynamic properties of ternary oxides in the system Co–Mo–O 138
phase equilibria in the {Sm,Tb,Tm}–Mn–Si systems at 870/1070 K. Structural data and melting temperatures of some ternary compounds in the R–Mn–Si systems (R=Y, La–Lu) 178
the phase diagram of the Eu–Sn system 211
constitution and hardnesses of the Al–Ir system 240
Phase stability
transition between periodic and quasiperiodic structures in Al–Ni–Co 215
Phase transition
transition between periodic and quasiperiodic structures in Al–Ni–Co 215
Photoluminescence
the effect of elastic strain on the optical properties of InGaP/GaAs grown using a valved phosphorus cracker cell in solid source MBE 299
Platinum–tin system
enthalpy of formation of the (Pt–Sn) system 158
Point defects
novel crystal structure in the Chevrel-phase compound EuMo$_6$Se$_8$. Transport and magnetic properties 85
Polythioantimonate flux synthesis
polythioantimonate flux synthesis of the low-dimensional compounds A$_2$AuSbS$_4$ (A=Rb, Cs) 71
Potential–pOH diagram
theoretical evaluation for thermodynamic stability of constituents of Mm-based hydrogen storage alloy in 6 M KOH solution at relatively high temperatures 114
Pr$_6$Fe$_{13}$Ag
on the magnetic ordering of R$_6$Fe$_{13}$X compounds 44
Pr$_6$Fe$_{13}$Au
on the magnetic ordering of R$_6$Fe$_{13}$X compounds 44

Quasicrystals
transition between periodic and quasiperiodic structures in Al–Ni–Co 215

Raman spectra
structure and characterization of a mixed crystal Rb$_2$SO$_4$.Te(OH)$_6$ 107
Rare earth intermetallic
on synthesis and magnetic properties of Nd(Fe, Mo, Ti)$_{12}$Z$_x$ (Z=N, H) 310
Rare earth manganese silicides
phase equilibria in the {Sm,Tb,Tm}–Mn–Si systems at 870/1070 K. Structural data and melting temperatures of some ternary compounds in the R–Mn–Si systems (R=Y, La–Lu) 178
Rare-earth palladium indides
structural chemistry, magnetism and thermodynamic properties of R$_2$Pd$_2$In 26
Rare earth-based hydrogen storage alloy
studies on multi-component rare earth-based hydrogen storage alloys with small amounts of boron 314
Reduction process
tantalum powder production by magnesiothermic reduction of TaCl$_5$ through an electronically mediated reaction (EMR) 265

($\beta+\gamma_0$) region
a complex structure in the ($\beta+\gamma_0$) region of the Cu–Al alloys 188
Relative phase stability
phase stability and fcc/hcp martensitic transformation in Fe–Mn–Si alloys: Part II. Thermodynamic modelling of the driving forces and the M_s and A_s temperatures 168
Resistivity
structural chemistry, magnetism and thermodynamic properties of R$_2$Pd$_2$In 26
Rietveld analysis
determination of the position and occupancy of deuterium in CaNi$_5$ deuterides by neutron diffraction 204
Rubidium sulfate–tellurate
structure and characterization of a mixed crystal Rb$_2$SO$_4$.Te(OH)$_6$ 107

Solid oxide galvanic cell
thermodynamic studies on LaFeO$_3$(s) 94
Specific heat
structural chemistry, magnetism and thermodynamic properties of R$_2$Pd$_2$In 26
Sputtering
synthesis of the compound CrN by DC reactive sputtering 294
Stabilization of intermediate phases
determination of the position and occupancy of deuterium in CaNi$_5$ deuterides by neutron diffraction 204
Substitution
hydrogenation properties of Mg$_{1-x}$M1$_x$Cu$_2$ (M1=La and Nd) with larger interstitial sites than MgCu$_2$ 262
cobalt- and copper-substitution effects on thermal stabilities and hydriding properties of amorphous MgNi 279

Tantalum
tantalum powder production by magnesiothermic reduction of TaCl$_5$ through an electronically mediated reaction (EMR) 265
Temperature
theoretical evaluation for thermodynamic stability of constituents of Mm-based hydrogen storage alloy in 6 M KOH solution at relatively high temperatures 114
TEM studies
a complex structure in the ($\beta+\gamma_0$) region of the Cu–Al alloys 188
Terbium cobalt compounds
spin-reorientation transitions and magnetic anisotropy in TbFe$_{11-x}$Co$_x$Ti compounds 20
Terbium iron compounds
spin-reorientation transitions and magnetic anisotropy in TbFe$_{11-x}$Co$_x$Ti compounds 20
Ternary compound
on synthesis and magnetic properties of Nd(Fe, Mo, Ti)$_{12}$Z$_x$ (Z=N, H) 310
Ternary rare earth intermetallics
structural chemistry, magnetism and thermodynamic properties of R$_2$Pd$_2$In 26
Ternary rare earth silicides
magnetic anisotropy and magnetic properties of RTSi (R=Gd, Y; T=Mn, Fe) compounds 16
Ternary systems
phase equilibria in the {Sm,Tb,Tm}–Mn–Si systems at 870/1070 K. Structural data and melting temperatures of some ternary compounds in the R–Mn–Si systems (R=Y, La–Lu) 178
TG–DTA
electrical resistivity, oxidation resistivity and hardness of single crystal compounds in the Er–Rh–B system 65
Thermal treatment
improvement of the thermodynamical and electrochemical properties

of multicomponent Laves phase hydrides by thermal annealing 284
Thermit
a study on the preparation of iron aluminium based intermetallic alloy by aluminothermic smelting technique 255
Thermodynamic activities
thermodynamic study of the CsCl–$CeCl_3$ system by Knudsen effusion mass spectrometry 77
Thermodynamic functions
thermodynamic studies on $LaFeO_3$(s) 94
Thermodynamics
experimental investigation and thermodynamic calculation of excess enthalpies in the Ag–Pb–Te system 147
enthalpy of formation of the (Pt–Sn) system 158
phase stability and fcc/hcp martensitic transformation in Fe–Mn–Si alloys: Part II. Thermodynamic modelling of the driving forces and the M_s and A_s temperatures 168
standard enthalpies of formation of some 5d transition metal silicides by high temperature direct synthesis calorimetry 231
tantalum powder production by magnesiothermic reduction of $TaCl_5$ through an electronically mediated reaction (EMR) 265
Thermodynamic stability
theoretical evaluation for thermodynamic stability of constituents of Mm-based hydrogen storage alloy in 6 M KOH solution at relatively high temperatures 114
Thermoelectric power
electrical and magnetic properties of YbPdGe and YbPtGe 39
Tin alloys
the phase diagram of the Eu–Sn system 211
Torque curves
spin-reorientation transitions and magnetic anisotropy in $TbFe_{11-x}Co_xTi$ compounds 20
Transition metal silicides
standard enthalpies of formation of some 5d transition metal silicides by high temperature direct synthesis calorimetry 231
Transport properties
novel crystal structure in the Chevrel-phase compound $EuMo_6Se_8$. Transport and magnetic properties 85

UCu_5In
crystal structure of UCu_5In 196
Uranium intermetallics
crystal structure of UCu_5In 196

Valence band splitting
the effect of elastic strain on the optical properties of InGaP/GaAs grown using a valved phosphorus cracker cell in solid source MBE 299
Vaporization
thermodynamic study of the CsCl–$CeCl_3$ system by Knudsen effusion mass spectrometry 77

XPS
surface analyses of an alkali-treated $Zr_{0.9}Ti_{0.1}Ni_{1.1}Co_{0.3}Mn_{0.8}V_{0.2}$ alloy for use in nickel–metal hydride batteries 99

YbPdGe
electrical and magnetic properties of YbPdGe and YbPtGe 39
YbPtGe
electrical and magnetic properties of YbPdGe and YbPtGe 39

Zirconia
preparation of tetragonal ZrO_2–12 mol% CeO_2 and ZrO_2–6 mol% $YO_{1.5}$ solid solutions at reduced temperature by a simple aqueous solution route using citric acid as a complexant 125
Zn–1.6wt.% Al alloy
effect of continuous cooling on the decomposition processes in a Zn–1.6 wt.% Al alloy 131